

6/26/01

MEMORANDUM

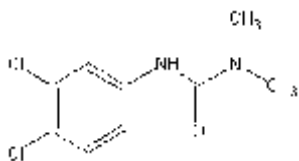
SUBJECT: **Diuron.** List A Reregistration Case 0046. PC Code 035505. **Product Chemistry Chapter for the Reregistration Eligibility Decision [RED] Document.** DP Barcode D274489.

FROM: K. Dockter, Chemist
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THRU: Alan Nielsen, Branch Senior Scientist
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TO: Diana Locke, Ph.D., Risk Assessor
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Diuron [3-(3,4-dichlorophenyl)-1,1-dimethylurea] is registered for selective and total weed control in crops such as: alfalfa, asparagus, citrus, cotton, orchards, sugar cane, wheat, and vineyards.



Empirical formula: $C_9H_{10}Cl_2N_2O$

Molecular weight: 233.1
CAS Registry No.: 330-54-1
PC Code: 035505

Chemical structure by J. Punzi

A search of REFS conducted 4/26/01 identified 95 active diuron products; 6 of which are technicals or manufacturing use products, which are subject to a RED. They are identified in Table 1.

Table 1. Technical Diuron Active Products

<u>EPA Reg. No.</u>	<u>CSF* Date</u>	<u>Registrant</u>	<u>Product Name</u>	<u>% a.i.</u>
1812-412 ¹	10/30/97	Griffin L.L.C.	Dupont Diuron Technical Herbicide	98.4
19713-66	2/15/95	Drexel Chml. Co.	Drexel Diuron Technical	98.0
19713-275 ²	1/6/89	“	Diuron Technical	97.
67640-XX(E)2	10/24/95	Sanachem U.S.A., Inc.	“	98.8
12020-1	8/26/86	Staveley Chmls. Ltd.	“	99.25
46120-1 ³	1/26/84	United Phosphorus Europe Ltd.	“ Herbicide	98

* Confidential Statement of Formula.

¹ Transferred from Dupont 352-324 on 4/8/98.

² Transferred from IDA, INC. 45115-27 CSF dated 1/6/89, RD scanned 4/15/92.

³ Transferred from Aceto Agric. Chmls. Corp. 2749-58 on 5/24/90.

The product chemistry data base is not complete; new CSFs are required which reflect preliminary analyses of current products together with discussions of formation of impurities. The available Generic Series 830 physical and chemical properties are given in Table 2.

Table 2. Generic Series 830 Physical and Chemical Properties

GLN		MRID	Data
6302	Color	net ¹	white
6303	Physical state	“	crystal
6304	Odor	“	none
7200	MP	“	158-9 C
7840	Water solubility	“	42 ppm @ 25 C
7950	vp	“	2x10 ⁻⁷ mm Hg @ 30 C
7550	Log P _{ow}	²	2.68
6320	Corrosion characteristics	43842201	not corrosive
6313	Stability to normal and elevated temperatures, metals, and metal ions	“	stable for 2 Yrs. in double polyethylene bag inside a fiber drum under warehouse conditions. Metals and metal ion data not given.
7050	UV/Visible absorption	NG	

NG: Not Given.

Bibliography

¹ Diuron. CASRN: 330-54-1. <http://toxnet.nlm.nih.gov/cgi-bin/sis/search>.

² Reddy, K.N. and M.A. Locke. 1996. *Molecular Properties as Descriptors of Octanol-Water Partition Coefficients of Herbicides*. Water, Air and Soil Pollution Vol. 86: pp 389-405.

cc: Reg. Std. F, SF, RF, Dockter, J. Punzi, R. Sandvig, C. Jarvis, Y. Yang, R. Allen.
RD\I Diuron RED Team.
7509C:RRB2:Rm712G:57886:KD/kd
Diuron RED [983Sr8] = D274489.mem.